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EXAMINER

PWU, JEFFREY C

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/943,118

Applicant(s)

CUDD ET AL

Examiner

Jeffrey C. Pwu

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 4/26/05 & 12/20/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 70-97 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 70-97 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Title***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 70, 80, and 89 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure lacks written description in the description of how to determine if the request for data can be fulfilled within a predetermined target period. It is unclear what is a predetermined period or what is a target period.

4. Claims 85 and 94 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed

Art Unit: 2143

invention. The disclosure lacks clear written description in the description of how to discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. It is unclear what is a relative slow connection speed to be determined to discard or demote the addresses of proxy server clients.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 70, 80, and 89 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 70, 80, and 89 are vague and indefinite because it is unclear what is a predetermined target period.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 70-97 are rejected under 35 U.S.C. 102(e) as being anticipated by Moore et al.  
(U.S. 6,618,752)

Art Unit: 2143

As closely interpreted by the examiner, reference Moore et al. teach claims :

70. A method of a server downloading data via a client-server communications network, the method comprising:

receiving a request for data from a client; (302)

determining if the request for data can be fulfilled within a predetermined target period;

(col.2, lines 47-67) and

sending to the client a proxy list comprising an address of at least one proxy server client (“child host(s)”) which stores requested data in a local cache if the request for data is unable to be fulfilled within the predetermined target period. (col.2, lines 47-67 - “a system and method for multicasting which includes the steps of receiving a Jth request for receiving a multicast stream by supervisory server application running on a supervisory server from a Jth client running on a Jth computer, transmitting a Jth instance of a portable deployable child host to the Jth computer, establishing a Jth connection between the Jth instance portable deployable child host and an Ith portable deployable host, transmitting a multicast data stream though the Jth connection from the Ith instance of the child host to the Jth instance of the child host, receiving a Kth request for receiving a multicast stream by the supervisory server application from a Kth client running on a Kth computer, transmitting a Kth instance of the portable deployable child host to the Kth computer, establishing a Kth connection between the Kth instance of the portable deployable child host and the Jth instance of the portable deployable child host, transmitting the ulticast data stream through the Kth connection from the Jth instance of the child host to the Kth instance of the child host”)

Art Unit: 2143

71. A method according to claim 70, wherein the predetermined target period is variable. (see method steps of fig.4A, particularly steps 402, 404, 406, 408, 410, 412, 414)

72. A method according to claim 71, wherein the predetermined target period varies as a function of a client-server connection speed. (fig.4A; bandwidth measurement)

73. A method according to claim 72, wherein the predetermined target period is shortened when the client-server connection speed is relatively fast and lengthened when the client-server connection speed is relatively slow. (method steps 402, 404, 406, 408, 410, 412, 414)

74. A method according to claim 70, further comprising maintaining a look-up table which correlates items of data with addresses of one or more proxy server clients at which the items of data are cached. (416, 418)

75. A method according to claim 74, further comprising: receiving cache status change reports from the one or more proxy server clients at which the items of data are cached; and updating the look-up table using the cache status change reports. (614)

76. A method according to claim 74, further comprising: assessing connection speeds to the one or more proxy server clients whose addresses are contained in the look-up table; and discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. (702-704)

Art Unit: 2143

77. A method according to claim 70, further comprising:

receiving an address of a proxy server client that provided requested data; and

assembling an address list of proxy server clients most commonly accessed to obtain requested data. (708-712)

78. A method according to claim 70, wherein the proxy list comprises addresses of proxy server clients whose workload is below a workload limit. (704)

79. A method according to claim 70, wherein the network comprises the Internet, the at least one proxy server client comprises a user terminal running a web browser, and the respective local cache is associated with the web browser on the user terminal. (col.2, lines 36-41; 106)

80. A client-server communications network comprising: a plurality of clients, each client including a local cache for storing data downloaded via the network; and  
a server including means for receiving a request for data from a client, means for determining if the request for data can be fulfilled within a predetermined target period, and means for sending to the client a proxy list comprising an address of at least one proxy server client which stores requested data in a local cache if the request for data is unable to be fulfilled within the predetermined target period. (Claim 80 is similarly rejected as in claim 70)

81. A network according to claim 80, wherein the predetermined target period is variable.  
(see method steps of fig.4A, particularly steps 402, 404, 406, 408, 410, 412, 414)

Art Unit: 2143

82. A network according to claim 81, wherein the server includes means for sensing a client-server connection speed, and means for varying the predetermined target period based upon the client server connection speed. (method steps of fig.4A, particularly steps 402, 404, 406, 408, 410, 412, 414; also see downloading bandwidth, “Methods for managing the network to minimize the bandwidth load on participating computers, and to reconfigure the network when clients join or leave the network”)

83. A network according to claim 80, wherein the server includes means for maintaining a look-up table which correlates items of data with addresses of one or-more proxy server clients at which the items of data are cached. (614)

84. A network according to claim 83, wherein the server includes means for receiving cache status change reports from the one or more proxy server clients at which the items of data are cached, and means for updating the look-up table using the cache status change reports. (702-704)

85. A network according to claim 83, wherein the server includes means for assessing connection speeds-to the one or more proxy server clients whose addresses are contained in the look-up table, and means for discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. (408)



Art Unit: 2143

86. A network according to claim 80, wherein the server includes means for receiving an address of a proxy server client that provided requested data, and means for assembling an address list of proxy server clients most commonly accessed to obtain requested data. (Fig.4A)

87. A network according to claim 80, wherein the proxy list comprises addresses of proxy server clients whose workload is below a workload limit. (Fig.5D)

88. A network according to claim 80, wherein the network comprises the Internet, the plurality of clients comprise user terminals running web browsers, and the respective local caches are associated with the browsers on the user terminals. (col.2, lines 36-41; 106)

89. A server for a client-server communications network, the server comprising:  
means for receiving a request for data from a client;  
means for determining if the request for data can be fulfilled within a predetermined target period; and  
means for sending to the client a proxy list comprising an address of at least one proxy server client which stores requested data in a local cache if the request for data is unable to be fulfilled within the predetermined target period. (Claim 89 is similarly rejected as in claim 70)

90. A server according to claim 89, wherein the predetermined target period is variable. (see method steps of fig.4A, particularly steps 402, 404, 406, 408, 410, 412, 414)

Art Unit: 2143

91. A server according to claim 90, further comprising: means for sensing a client-server connection speed; and means for varying the predetermined target period based upon the client-server connection speed. (method steps 402, 404, 406, 408, 410, 412, 414)

92. A server according to claim 89, further comprising means for maintaining a look-up table which correlates items of data with addresses of one or more proxy server clients at which the items of data are cached. (614)

93. A server according to claim 92, further comprising: means for receiving cache status change reports from the one or more proxy server clients at which the items of data are cached; and means for updating the look-up table using the cache status change reports. (614)

94. A server according to claim 92, further comprising: means for assessing connection speeds to the one or more proxy server clients whose addresses are contained in the look-up table; and means for discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. (408)

95. A server according to claim 89, further comprising: means for receiving an address of a proxy server client that provided requested data; and means for assembling an address list of proxy server clients most commonly accessed to obtain requested data. (216 A-D and 218 A-D)

Art Unit: 2143

96. A server according to claim 89, wherein the proxy list comprises addresses of proxy server clients whose workload is below a workload limit. (col.4, lines 33-37)

97. A server according to claim 89, wherein the network comprises the Internet. (col.2, lines 36-41; 106)

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 70-97 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2143

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Pwu whose telephone number is 571-272-6798.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



12/20/05

JEFFREY PWU  
PRIMARY EXAMINER